

its attacker about the head and lips during the process. The lizard paid not the slightest heed to these demonstrations on the part of its victim, but swallowed it in a few gulps and seemed none the worse for the experience.

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No. XVII.—THE SENSES OF A SNAKE.

The sight of snakes is not good in the day time even in the case of diurnal snakes with round pupilled eyes. Those snakes that stalk their prey instead of way-laying it, do so chiefly by means of the tongue. The two branches of the forked tongue, flickering up and down, come in contact with the two footprints of the animal or reptile stalked and then dart up to its own nose, each branch conveying to one of the nostrils the scent of its prey.

If a snake is watched stalking prey which it cannot see, in long grass for instance, it will be noticed that it follows the exact course, no matter how twisted, of the creature it is after, which proves that until the prey is sighted the snake depends on scent and not on hearing.

It is uncertain whether the tongue of a snake is able to sense a scent spoor itself, or whether it is entirely dependent on the nostrils of the snake to do this; at any rate the tongue appears to act as the carrier of the scent to the nostrils.

If the tongue itself could sense a scent spoor, it would no doubt receive it in the form of taste. It is, however, doubtful whether a snake possesses much, if any, sense of taste. Several instances have been reported, and I have seen a few cases myself, where snakes in captivity have seized and swallowed cloths, and, in one case even a stick, which had previously come in contact with, and absorbed the scent of rats, which the snakes, relying chiefly on their sense of scent, mistook them for. It must, however, be admitted that in all such cases I have heard of, the snakes in question have been Pythons, which, being nocturnal snakes, with eyes adapted for night work (*i.e.*, elliptic-pupilled), see badly in the day-light.

One of the most notable examples of such an accident, was the case of a Python at the London Zoological Gardens which seized and swallowed a rug. I do not know whether the snake was misled by feeling or by scent in this case, but it helps to show that snakes possess little or no sense of taste.

A snake's tongue appears to act as a guide as well as a scent carrier, playing the same part as whiskers do in a cat. As, however, a snake is not totally blind and only bad sighted, it is curious that it uses its tongue as much as it does, when not hunting.

Possessing no external ears, even in the form of ear-holes, the hearing of snakes is bad. Sounds appear to be conveyed to it chiefly through vibrations through the ground, and it is easily disturbed by footfalls, while often remaining deaf to louder noises above ground level, and I have found that it is possible to approach closer to a snake without alarming it, when walking on a ground level above it, as for example walking on the bund of a paddyfield when the snake is lying below the bund.

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TRAVANCORE.

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